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EXAMINER

MOORTHY, ARAVIND K

ART UNIT	PAPER NUMBER
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2131

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,217

Applicant(s)

UNGER ET AL.

Examiner

Aravind K. Moorthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40,51-135 and 139-178 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40,51-135 and 139-178 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the communications filed on 30 October 2006.
2. Claims 1-40, 51-135 and 139-178 are pending in the application.
3. Claims 1-40, 51-135 and 139-178 have been rejected.
4. Claims 41-50 and 136-138 have been cancelled.

Information Disclosure Statement

5. The examiner has considered the information disclosure statement filed on 10/30/06.

Response to Arguments

6. Applicant's arguments with respect to claims 1-40, 51-135 and 139-178 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1, 16, 31, 62, 89, 102, 148, 150, 153 and 154 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claims 1, 16, 31, 62, 89, 102, 148, 150, 153 and 154 are directed towards a method of encrypting a digital television signal. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for

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an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under Sec. 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting").

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-6, 9-23, 26-36, 51, 54-59, 62-70, 73-79, 82-94, 97-108, 111-119, 121, 122, 125-135, 139-155, 157-162, 165-170 and 173-178 are rejected under 35 U.S.C. 102(e) as being anticipated by Javed US 2001/0036271 A1.

As to claim 1, Javed discloses a method of encrypting a digital television signal, comprising:

examining unencrypted packets of data in the digital television signal to identify a packet type [0066-0068];

duplicating packets identified as being of the packet type to create first and second duplicate packets [0066-0068];

encrypting the first duplicate packets according to a first encryption method to create first encrypted packets [0090];

encrypting the second duplicate packets according to a second encryption method to create second encrypted packets [0090]; and

replacing the unencrypted packets of the packet type with the first and second encrypted packets in the digital television signal to produce a multiple partially encrypted digital television signal [0091].

As to claims 2, 17 and 166, Javed discloses distributing the multiple partially encrypted digital television signal [0092].

As to claims 3, 18, 63, 75 and 167, Javed discloses that the packet type comprises a packet carrying information that is needed to decode the digital television signal [0094-0095].

As to claims 4, 21, 34, 65, 77, 92, 106, 119, 141, 157 and 168, Javed discloses that the digital television signal complies with an MPEG standard [0083]. Javed discloses that the packet type comprises packets carrying a payload that comprises a packetized elementary stream (PES) header [0083].

As to claims 5, 22, 35, 58, 78, 93, 107, 121, 146 and 169, Javed discloses that the digital television signal complies with the digital satellite service transport standard, and wherein the packet type comprises packets carrying a payload of a packetized elementary stream header [0083].

As to claims 6, 23, 36, 59, 70, 79, 94, 108, 122, 147, 162 and 170, Javed discloses that the packet type comprises video packets carrying a payload of a video sequence header [0055].

As to claims 9, 26 and 173, Javed discloses assigning a packet identifier to the unencrypted packets [0055].

As to claims 10, 27, 28 and 174, Javed discloses that the packet identifier comprises a primary packet identifier [0055]. Javed discloses assigning the primary packet identifier to the first encrypted packets and assigning a secondary packed identifier to the second encrypted packets [0055].

As to claims 11 and 175, Javed discloses that the packet identifier comprises a primary packet identifier [0055]. Javed discloses assigning the primary packet identifier to the second

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encrypted packets and assigning a secondary packet identifier to the first encrypted packets [0055].

As to claims 12, 29 and 40, Javed discloses a tangible computer readable electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a television signal [0041].

As to claims 13 and 30, Javed discloses that the multiple partially encrypted television signal is distributed over an electronic transmission medium [0041].

As to claims 14, 19, 33, 56, 64, 76, 91, 105, 118, 160 and 176, Javed discloses that the television signal is compressed [0092]. Javed discloses that the packet type comprises a packet carrying information that is needed to decompress the television signal [0095].

As to claims 15 and 177, Javed discloses the method further comprising:

selecting packets according to a second selection criteria [column 6, lines 14-35];

duplicating the selected packets to create first and second duplicate packets [column 6, lines 14-35];

encrypting the first duplicate packets according to the first encryption method to create the first encrypted packets [column 6, lines 14-35]; and

encrypting the second duplicate packets according to the second encryption method to create the second encrypted packets [column 6, lines 14-35].

As to claim 16, Javed discloses a method of encrypting a digital television signal, comprising:

examining unencrypted packets of data in the digital television signal to identify a packet type [0066-0068];

encrypting packets identified as being of the packet type using a first encryption method to produce first encrypted packets [0066-0068];

encrypting the packets identified as being of the packet type using a second encryption method to produce second encrypted packets [0090]; and

replacing the unencrypted packets of the packet type with the first encrypted packets and the second encrypted packets in the digital television signal to produce a partially multiple encrypted television signal [0091].

As to claims 20 and 178, Javed discloses that the packet type comprises packets carrying information used to access the digital television signal [0069].

As to claim 31, Javed discloses a method of encrypting a digital television signal, comprising:

examining packets of data in the digital television signal to identify a packet type [0066-0068];

encrypting packets identified as being of the packet type using a first encryption method to produce first encrypted packets [0066-0068];

encrypting packets identified as being of the packet type using a second encryption method to produce second encrypted packets [0090-0091]; and

distributing the digital television signal with first and second encrypted packets of the packet type along other packets that are unencrypted [0090-0091].

As to claim 32, Javed discloses that the encrypting under the first and second encryption methods comprises encrypting packets identified as packets that are needed to decode the digital television signal [0055].

As to claim 51, Javed discloses a television set-top box, comprising:

a receiver receiving a digital television signal comprising [0066-0068]:

a plurality of unencrypted packets [0066-0068]; and

a plurality of encrypted packets, wherein the encrypted packets comprise at least a first encrypted packet encrypted under first encryption method and a second encrypted packet encrypted under a second encryption method [0090-0091], and wherein the encrypted packets contain information required to decode the digital television signal [0090-0091];

a decrypter that decrypts either packets encrypted under the first or the second encryption method to produce decrypted packets [0090-0091]; and

a decoder that decodes the unencrypted packets and the decrypted packets to produce a signal suitable for play on a television set [0090-0091].

As to claims 54, 142, Javed discloses that the digital television program is encoded according to an MPEG standard [as discussed above]. Javed discloses that the first encrypted packet of each of the plurality of encrypted packets and the unencrypted packets are identified by a primary packet identifier and the second encrypted packet of each of the plurality of encrypted packets are identified by a secondary packet identifier [0055].

As to claims 55, 143, Javed discloses that the digital television program is encoded according to an MPEG standard [as discussed above]. Javed discloses that the second encrypted packet of each of the plurality of encrypted packets and the unencrypted packets are identified by a primary packet identifier [0055]. Javed discloses that the first encrypted packet of each of the plurality of encrypted packets are identified by a secondary packet identifier [0055].

As to claims 57, 145, 161, Javed discloses decompressing means for decompressing the compressed digital television signal [0095].

As to claim 62, Javed discloses a method of decoding a multiple partially encrypted television signal, comprising:

receiving a digital television signal comprising a plurality of packets [0066-0068], wherein certain packets of the plurality of packets are encrypted packets [0066-0068], wherein the encrypted packets comprise at least a first encrypted packet encrypted under first encryption method and a second encrypted packet encrypted under a second encryption method, and a remainder of the packets are unencrypted [0090-0091], wherein the encrypted packets contain information that is required for correct decoding of the television signal [0090-0091];

decrypting a packet encrypted under one of the first and second encryption methods to produce decrypted packets [0095]; and

decoding the decrypted packets and the unencrypted packets to produce a decoded television signal [0095].

As to claim 66, Javed discloses a tangible computer readable electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of decoding a television signal [0095].

As to claim 67, Javed discloses that the receiving, decrypting and decoding are carried out in a television device [0095].

As to claim 68, Javed discloses that the television device comprises a television set-top box [column 3, lines 20-54].

As to claims 69 and 93, Javed discloses that the partially encrypted television signal complies with the digital satellite service transport standard [0091]. Javed discloses that the encrypted packets carry a payload of a packetized elementary stream header [0091].

As to claim 73, Javed discloses a method of decrypting partially encrypted content, comprising:

receiving partially encrypted content comprising unencrypted content [0066-0068], content encrypted under both a first encryption system and a second encryption system [0090-0091], the encrypted content comprising information needed for correct decoding of the partially encrypted content [0090-0091]; and

decrypting the encrypted content encrypted under the first encryption system to produce decrypted content [0095].

As to claim 74, Javed discloses decoding the unencrypted content and the decrypted content to decode the partially encrypted content [0090-0091].

As to claim 82, Javed discloses a tangible computer readable electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of decrypting [0090-0091].

As to claims 83, 100, 114, Javed discloses that the receiving, and decrypting are carried out in a television device [column 3, lines 20-54].

As to claims 84, 101, 115, Javed discloses that the television device comprises a television set-top box [0090-0091].

As to claims 85 and 98, Javed discloses that the receiving, and decrypting are carried out in an integrated circuit [0090-0091].

As to claims 86, 99, 113, Javed discloses that the integrated circuit comprises one of an application specific integrated circuit and a field programmable gate array [0090-0091].

As to claims 87, 112, Javed discloses that the receiving, and decrypting are carried out in a plurality of integrated circuits [0090-0091].

As to claim 88, Javed discloses that the plurality of integrated circuit comprises at least one of an application specific integrated circuit and a field programmable gate array [0090-0091].

As to claim 89, Javed discloses a method of decoding a partially encrypted television program, comprising:

receiving the partially encrypted television program comprising a plurality of clear packets [0066-0068], a plurality of packets encrypted under a first encryption algorithm, and a plurality of packets encrypted under a second encryption algorithm [0090-0091];

wherein the packets encrypted under the first and second encryption algorithms are packets that are needed for proper decoding of the television program [0090-0091];

decrypting the packets encrypted under the first: encryption algorithm to produce decrypted packets [0095]; and

decoding the decrypted packets and the clear packets [0095].

As to claim 90, Javed discloses that the television program comprises a digital television program [column 3, lines 20-54].

As to claim 97, Javed discloses an electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of decoding a television signal [0090-0091].

As to claim 102, Javed discloses a method of decrypting a partially encrypted television program, comprising:

receiving the partially encrypted television program comprising a plurality of clear packets, a plurality of packets encrypted under a first encryption algorithm [0090-0095], and a plurality of packets encrypted under a second encryption algorithm [0090-0095];

wherein the packets encrypted under the first and second encryption algorithms are packets that are needed to properly decode the television program [0090-0095];

wherein the clear packets are identified by a first packet identifier [0055];

wherein the packets encrypted under the first encryption algorithm are identified by a second packet identifier (PID) [0055], and wherein the packets encrypted under the second encryption algorithm are identified by a third packet identifier (PID) [0055]; and

decrypting the packets encrypted under the first encryption algorithm to produce decrypted packets [0095].

As to claim 103, Javed discloses decoding the decrypted packets and the clear packets [0095].

As to claim 104, Javed discloses that the partially encrypted television program comprises a digital partially encrypted television program [0095].

As to claim 111, Javed discloses a tangible computer readable electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of decrypting [0095].

As to claim 116, Javed discloses a method of multiple partial encrypting a packetized stream of information, comprising:

examining packets of data in the stream of information to identify a packet type, wherein the packet type is needed to decode the data stream [0066-0068];
and

duplicating packets identified as being of the packet type to create first and second duplicate packets [0066-0068];

at a first encrypting device, encrypting the first duplicate packets according to a first encryption method to create first encrypted packets [0090-0095]; and

at a second encrypting device, encrypting the second duplicate packets according to a second encryption method to create second encrypted packets [0090-0095]; and

sending the first and second encrypted packets along the packets of data in the stream of information that are not of the identified packet type to a recipient [0090-0095].

As to claim 117, Javed discloses that the stream of information represents a television program and wherein each encrypting comprises encrypting packets identified as packets that are needed to decode the television program [0055].

As to claim 125, Javed discloses a tangible computer readable electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a packetized stream of information [0090-0095].

As to claim 126, Javed discloses a method of manipulating packetized digital content, comprising:

examining unencrypted packets to identify a packet type [0066-0068];

duplicating the packets identified as being of the packet type to produce first and second duplicate packets [0066-0068]; and

inserting the first and second duplicate packets into the digital content to produce partially duplicated content having first and second duplicate packets instead of the identified packets [0066-0068].

As to claim 127, Javed discloses identifying the first duplicate packets in the partially duplicated content and encrypting the first duplicate packets under a first encryption method to produce first encrypted duplicate packets [0066-0068].

As to claim 128, Javed discloses inserting the first encrypted duplicated packets into the digital content in place of the first duplicate packets to produce partially encrypted content [0066-0068].

As to claim 129, Javed discloses identifying the second duplicate packets and encrypting the second duplicate packets under a second encryption method to produce second encrypted duplicate packets [0066-0068].

As to claim 130, Javed discloses inserting the second encrypted duplicate packets into the digital content in place of the second duplicate packets to produce partially dual encrypted content [0066-0068].

As to claim 131, Javed discloses a method of manipulating packetized digital content, comprising:

- examining unencrypted packets to identify a packet type [0066-0068];
- duplicating the packets identified as being of the packet type to produce first and second duplicate packets [0066-0068];
- encrypting the first and second duplicate packets [0066-0068]; and

inserting the first and second encrypted packets into the digital content to produce partially encrypted content [0066-0068].

As to claim 132, Javed discloses that the first and second duplicate packets are encrypted under first and second encryption algorithms [0066-0068].

As to claim 133, Javed discloses a method of manipulating packetized digital content, comprising:

examining unencrypted packets to identify a packet type [0066-0068];

duplicating the packets identified as being of the packet type to produce first and second duplicate packets [0066-0068];

encrypting the first duplicate packets under a first encryption method [0066-0068];

encrypting the second duplicate packets under a second encryption method [0066-0068]; and

inserting the encrypted first duplicate packets and encrypted second duplicate packets into the digital content to produce partially encrypted content [0066-0068].

As to claim 134, Javed discloses a method of allowing multiple conditional access providers in a content delivery system, comprising:

examining unencrypted packets of content to identify packets of a packet type [0066-0068];

encrypting packets of the packet type using a first encryption method used by a first conditional access provider to produce first encrypted packets [0066-0068];

encrypting packets of the packet type using a second encryption method used by a second conditional access provider to produce second encrypted packets [0066-0068];

replacing the packets of the packet type with the first and second encrypted packets to produce partially dual encrypted content [0066-0068]; and

distributing the partially dual encrypted content in the content delivery system [0066-0068].

As to claim 135, Javed discloses combining entitlement control messages for the first and second conditional access provider with the partially encrypted content [0066-0068].

As to claim 139, Javed discloses a television receiver device, comprising:

a receiver receiving a digital television signal comprising [0066-0068]:

a plurality of unencrypted packets [0066-0068]; and

a plurality of encrypted packets [0066-0068], wherein the encrypted packets comprise at least first encrypted packets encrypted under first encryption method and second encrypted packets encrypted

under a second encryption method [0066-0068], and wherein the encrypted packets contain information used to decode the digital television signal [0066-0068];

a decrypter that decrypts at least one of the first and second encrypted packets [0090-0095]; and

a decoder that decodes the unencrypted packets and the decrypted packets to produce a signal suitable for play on a television set [0090-0095].

As to claim 144, Javed discloses that the digital television signal is compressed. Javed discloses that the encrypted packets comprises a packet type that is used to decompress the digital television signal [0090-0095].

As to claim 148, Javed discloses a method of detecting and decrypting multiple carriage signals, wherein each carriage is partially encrypted, comprising:

receiving partially multiple encrypted content comprising unencrypted content [0066-0068], and content encrypted under both a first encryption system and a second encryption system [0066-0068];

detecting encrypted portions of the partially multiple encrypted content encrypted under the first encryption system [0066-0068]; and

decrypting the encrypted content encrypted under the first encryption system to produce decrypted content [0090-0095].

As to claims 149 and 151, Javed discloses decoding the unencrypted content and the decrypted content to decode the partially multiple encrypted content [0090-00952].

As to claim 150, Javed discloses an apparatus for detecting and decrypting multiple carriage signals, wherein each carriage is partially encrypted, comprising:

means for receiving partially multiple encrypted content comprising unencrypted content [0066-0068], and content encrypted under both a first encryption system and a second encryption system [0066-0068];

means for detecting encrypted portions of the partially multiple encrypted content encrypted under the first encryption system [0066-0068]; and

means for decrypting the encrypted content encrypted under the first encryption system to produce decrypted content [0090-0095].

As to claim 152, Javed discloses a television set-top box, comprising:

means for receiving a partially multiple encrypted digital television signal comprising [0066-0068]:

a plurality of unencrypted packets [0066-0068]; and

a plurality of encrypted packets [0066-0068], wherein the encrypted packets comprise at least first encrypted packets encrypted under first encryption method and second encrypted packets encrypted under a second encryption method [0066-0068], and wherein the encrypted packets contain information required to decode the digital television signal [0066-0068];

means for decrypting at least one of the first and second encrypted packets [0090-0095]; and

means for decoding the unencrypted packets and the decrypted packets to produce a signal suitable for play on a television set [0090-0095].

As to claim 153, Javed discloses a television set-top box for detecting multiple carriage signals and decrypting based upon detection, comprising:

means for receiving a partially multiple encrypted digital television signal comprising [0066-0068]:

a plurality of unencrypted packets [0066-0068]; and

a plurality of encrypted packets [0066-0068], wherein the encrypted packets comprise at least first encrypted packets encrypted under first encryption method and second encrypted packets encrypted under a second encryption method [0066-0068], and wherein the encrypted packets contain information used to decode the digital television signal [0066-0068];

means for detecting encrypted portions of the partially multiple encrypted digital television signal encrypted under the first encryption method [0066-0068]; and

means for decrypting at least one the first and second encrypted packets [0090-0095].

As to claim 154, Javed discloses a television set-top box for detecting multiple carriage signals and decrypting based upon detection, comprising:

a receiver receiving a digital television signal comprising [0066-0068]:

a plurality of unencrypted packets[0066-0068]; and

a plurality of encrypted packets, wherein the encrypted packets comprise at least a first encrypted packet encrypted under first encryption method and a second encrypted packet encrypted under a second encryption method [0066-0068], and wherein the encrypted packets contain information used to decode the digital television signal [0066-0068]; and

a decrypter that decrypts at least one the first and second encrypted packets [0090-0095].

As to claim 155, Javed discloses the television set-top box, further comprising:

a decoder that decodes the unencrypted packets and the decrypted packets to produce a signal suitable for play on a television set [0090-0095].

As to claim 158, Javed discloses that the digital television signal complies with an MPEG standard [as discussed above]. Javed discloses that the first encrypted packet of each of the plurality of encrypted packets and the unencrypted packets are identified by a primary packet identifier and the second encrypted packet of each of the plurality of encrypted packets are identified by a secondary packet identifier [0055].

As to claim 159, Javed discloses that the digital television signal complies with an MPEG standard [as discussed above]. Javed discloses that the second encrypted packet of each of the

plurality of encrypted packets and the unencrypted packets are identified by a primary packet identifier. Javed discloses that the first encrypted packet of each of the plurality of encrypted packets are identified by a secondary packet identifier [0055].

As to claim 165, Javed discloses a method of encrypting a digital television signal, comprising:

- examining unencrypted packets of data in the digital television signal to identify a packet type [0066-0068];

- duplicating packets identified as being of the packet type to create first and second duplicate packets [0066-0068];

- encrypting the first duplicate packets according to a first encryption method to create first encrypted packets [0066-0068];

- encrypting the second duplicate packets according to a second encryption method to create second encrypted packets [0066-0068]; and

- replacing the unencrypted packets of the packet type with the first and second encrypted packets in the digital television signal to produce a multiple partially encrypted digital television signal [0066-0068].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7, 24, 37, 46, 60, 71, 80, 95, 109, 123, 163 and 171 are rejected under 35 U.S.C. 103(a) as being unpatentable over Javed US 2001/0036271 A1 as applied to claims 1, 16, 31, 41, 51, 62, 73, 89, 102, 116, 154 and 165 above, and further in view of Harumoto et al U.S. Patent No. 6,754,276 B1.

As to claims 7, 24, 37, 46, 60, 71, 80, 95, 109, 123, 163 and 171, Javed does not teach that the packet type comprises video packets carrying a payload of a group of pictures header.

Harumoto et al teaches a packet that comprises video packets carrying a payload of a group of pictures header [column 12, lines 44-62].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed so that video packets would have carried a payload of a group of pictures header.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed by the teaching of Harumoto et al because it achieves a system that which easily and surely conforms to a one-second rule [column 7, lines 26-28].

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10. Claims 8, 25, 38, 47, 61, 72, 81, 96, 110, 124, 164 and 172 are rejected under 35 U.S.C. 103(a) as being unpatentable over Javed US 2001/0036271 A1 as applied to claims 1, 16, 31, 41, 51, 62, 73, 89, 102, 116, 154 and 165 above, and further in view of Darr, Jr. et al U.S. Patent No. 5,583,863 (hereinafter Darr).

As to claims 8, 25, 38, 47, 61, 72, 81, 96, 110, 124, 164 and 172, Javed does not teach that the packet type comprises video packets carrying a payload of closed captioning information.

Darr teaches a packet carrying a payload of closed captioning information [column 18 line 57 to column 19 line 21].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed so that the video packets would have carried a payload of closed captioning information.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed by the teaching of Darr because it produces a full service digital broadband network that provides efficient transmission of DS-3 ATM cell streams [column 19, lines 21-34].

11. Claims 39 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Javed US 2001/0036271 A1 as applied to claims 31 and 116 above, and further in view of Monroe et al US 2002/0097322 A1.

As to claims 39 and 120, Javed teaches that the digital television signal complies with an MPEG standard, as discussed above.

Javed does not teach that the packet type is identified as a packet containing MPEG 1-picture packets.

Monroe et al teaches a packet that conforms to the MPEG-1 standard and its benefits [0083].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed so that the MPEG digital television signal packets would have complied with the MPEG-1 standard.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed by the teaching of Monroe et al because the use of MPEG-1 streams is advantageous due to the low cost of the encoder hardware and the ubiquity of software MPEG-1 players [0062].

12. Claims 42, 52, 140 and 156 rejected under 35 U.S.C. 103(a) as being unpatentable over Javed US 2001/0036271 A1 as applied to claims 41, 51, 139 and 154 above, and further in view of Misu US 2002/0047915 A1.

As to claims 42, 52, 140 and 156, Javed does not teach that the unencrypted packets and encrypted packets comprise transport stream packets.

Misu teaches packets that comprise transport stream packets and the benefits of their use [0063-0065].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed so that the unencrypted and encrypted packets would have comprised transport stream packets.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Javed by the teaching of Misu because the transport stream packets can be easily carried out within specified intervals without loss of data at high speed, thereby makes it possible using software and reduces hardware thereby chip size and large-scale cost is reduced.

As to claims 43 and 53, Javed teaches that the encrypted transport stream packets comprise packets containing MPEG packetized elementary stream (PES) headers, as discussed above.

Conclusion

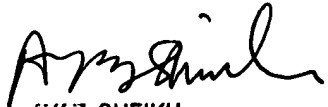
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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November 10, 2006




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